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(71) Applicant (for all designated States except US): KOREA RESEARCH INSTITUTE OF CHEMICAL TECHNOLOGY [KR/KR]; 100 Jang-dong, Yuseong-gu, Daejeon 305-343 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): KIM, Yong Hwan [KR/KR]; 111-702 Gangbyeon Apt., Mannyeon-dong, Seo-gu, Daejeon 302-741 (KR). AN, Eun Suk [KR/KR]; 105-1407 Galma Apt., Galma-dong, Seo-gu, Daejeon 302-755 (KR). WON, Keehoon [KR/KR]; 303 Salang

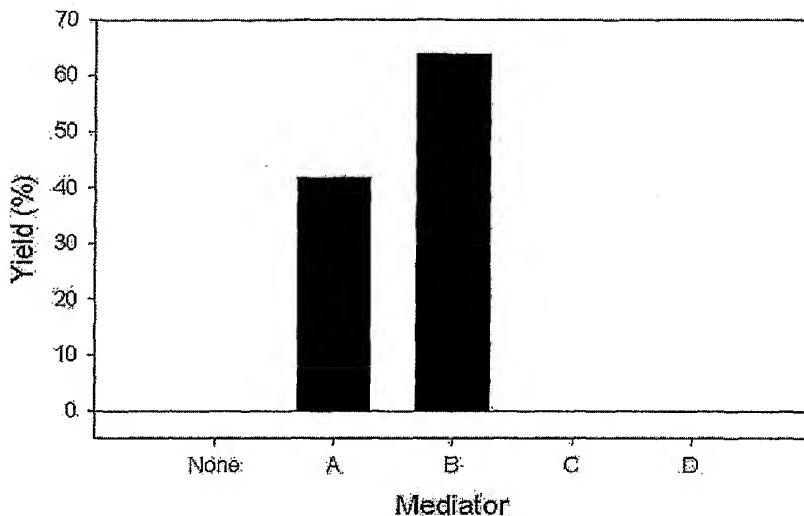
Villa, 355-7 Jangdae-dong, Yuseong-gu, Daejeon 305-308 (KR). LEE, Yeon Soo [KR/KR]; 7-302 Hanmaru Apt., 1388 Dunsan-dong, Seo-gu, Daejeon 302-773 (KR). SONG, Jae Kwang [KR/KR]; 202-514 Jugong Apt., Wolpyeong 2-dong, Seo-gu, Daejeon 302-793 (KR). RYU, Jeong Yong [KR/KR]; 8-503 GongdongGwanli Apt., Research Complex, Doryong-dong, Yuseong-gu, Daejeon 305-340 (KR). SONG, Bong Keun [KR/KR]; 109-804 Hanwool Apt., 160-1 Sinseong-dong, Yuseong-gu, Daejeon 305-707 (KR).

(74) Agent: PAIK, Nam-Hoon; 14th Fl., KTB Network Building,, 826-14 Yeoksam-dong,, Kangnam-ku,, Seoul 135-769 (KR).

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(54) Title: PROCESS FOR PREPARING PHENOL RESIN BY USING PHENOTHIAZINES MEDIATOR



(57) Abstract: The present invention relates to a process for preparing a phenolic polymer using a phenothiazine-based mediator, in particular, to a process for preparing a phenolic polymer via polymerization of phenolic monomers by using a phenothiazine-based mediator in the presence of peroxidase biocatalyst and an oxidant, thereby drastically improving the enzyme reactivity of peroxidase. The phenolic polymers prepared according to the polymerization of this invention maintain unsaturated hydrocarbon groups linked to their side chains, so that they are very useful as a curing resin because they can easily form coatings through radical curing. In addition, the coating formed using the curing resin has an antioxidation effect and a low surface energy, so that they can prevent physical attachment of marine livings. Because the antifouling-causing functional groups are not consumed, the coatings continuously exhibit durability.

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